IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **George et al.**	§	
	§	Group Art Unit: **2169**
Serial No.: **09/717,818**	§	
	§	Examiner: **Robinson, Greta Lee**
Filed: **November 21, 2000**	§	
	§	Confirmation No.: **2114**
For: **Method and System for a Generic Metadata-Based Mechanism to Migrate Relational Data Between Databases**	§	

35525

PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF (37 C.F.R. 41.37)

This brief is in furtherance of the Notice of Appeal, filed in this case on March 17, 2009.

A fee of $540.00 is required for filing an Appeal Brief. Please charge this fee to IBM Corporation Deposit Account No. 09-0447. No additional fees are believed to be necessary. If, however, any additional fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0447. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0447.

REAL PARTY IN INTEREST

The real party in interest in this appeal is the following party: International Business Machines Corporation of Armonk, New York.

RELATED APPEALS AND INTERFERENCES

This appeal has no related proceedings or interferences.

STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

The claims in the application are: 1-20

B. STATUS OF ALL THE CLAIMS IN APPLICATION

Claims canceled: 7-18

Claims withdrawn from consideration but not canceled: None

Claims pending: 1-6, 19 and 20

Claims allowed: None

Claims rejected: 1-6, 19 and 20

Claims objected to: None

C. CLAIMS ON APPEAL

The claims on appeal are: 1-6, 19 and 20

STATUS OF AMENDMENTS

No Amendment was filed after final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

A. CLAIM 1 - INDEPENDENT

Independent claim 1 recites a method for migrating data between a first database and a second database as described in the specification at least on page 3, lines 1-2 and page 15, lines 8-13. Independent claim 1 recites the method comprising the steps of: determining dependencies among a plurality of tables in the first database as described in the specification at least on page 3, lines 10-13, page 16, lines 8-23, page 18, line 30 to page 19, line 6, and Figure 5B, block 552; retrieving metadata from the first database, wherein the metadata includes definitions for tables in the first database as described at least on page 3, lines 1-10, page 16, line 24 to page 17, line 6, page 18, line 27 to page 19, line 14, and Figure 5B, blocks 550 and 554; reading data from tables in the first database using a plurality of read operations, wherein the read operations are structured in accordance with the retrieved metadata as described at least on page 17, lines 7-28, page 20, lines 3-6, and Figure 5B, block 556, and wherein the read operations are in an order indicated by the determined dependencies as described at least on page 3, lines 10-13, page 16, line 8 to page 17, line 28, page 19, lines 3-6, page 19, lines 15-19, page 26, lines 4-9; and writing data to the second database using a plurality of write operations as described in the specification at least on page 17, lines 7-28, page 20, lines 7-23, and Figure 5B, block 560, wherein the write operations are in an order indicated by the determined dependencies as described at least on page 3, lines 10-13, page 16, line 8 to page 17, line 28, page 19, lines 3-6, page 19, lines 15-19, page 26, lines 4-9.

B. CLAIM 19 - DEPENDENT

Dependent claim 19 recites the method of claim 1, wherein the write operations are in an order indicated by the determined dependencies to ensure referential integrity in the second database as described in the specification at least on page 19, lines 22-31 and page 26, lines 4-9.

C. CLAIM 20 - INDEPENDENT

Dependent claim 20 recites the method of claim 4 (performing a predetermined modification operation on the data read from the tables in the first database prior to a write operation to the second database as described in the specification at least on page 3, lines 13-17 and page 26, lines 9-12), wherein the predetermined modification operation comprises assigning a default value to a field in a table in the second database that does not have a corresponding field in a corresponding table in the first database as described in the specification at least on page 23, line 30 to page 25, line 2 and Figure 6B, item 620.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to review on appeal are as follows:

A. GROUND OF REJECTION 1

Claims 1, 4, and 6 are rejected under 35 U.S.C. § 103 as being unpatentable over Ishihara et al. (U.S. Patent No. 6,636,876) in view of Ofek et al. (U.S. Patent No. 5,680,640); and

B. GROUND OF REJECTION 2

Claims 2, 3, and 5 are rejected under 35 U.S.C. § 103 as being unpatentable over Ishihara et al. (U.S. Patent No. 6,636,876) in view of Ofek et al. (U.S. Patent No. 5,680,640) and Underwood (U.S. Patent No. 6,633,878).

Claims 1-6, 19, and 20 are also rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. This rejection under 35 U.S.C. § 101 is not being appealed. Appellants will amend the claims to overcome this rejection at the appropriate time.

ARGUMENT

A. GROUND OF REJECTION 1 (Claims 1, 4 and 6)

Claims 1, 4, and 6 are rejected under 35 U.S.C. § 103 as being unpatentable over Ishihara et al. (U.S. Patent No. 6,636,876), hereinafter "*Ishihara*" in view of Ofek et al. (U.S. Patent No. 5,680,640), hereinafter "*Ofek*".

The Examiner states:

> Regarding claim 1, **Ishihara et al.** teaches a method for migrating data between a first database and second database [note: Abstract "a database copy apparatus, a database copy method, and a recording medium recorded with a database copy program, which increase the generality of a database copying irrespective of the database structure, by partitioning a copy **source database** into predetermined regions, and **copying records and inter-record connection relations** contained in the respective regions to a copy **target database"; Figure 7,** copy source database 70 and copy target database 901, the method comprising the steps of:
>
> determining dependencies among a plurality of tables in the first database [note: Figures 1-5; column 7 lines 1-19];
>
> retrieving metadata from the first database, wherein the metadata includes definitions for tables in the first database [note: database extraction section 20 Figure 7; column 7 lines 20-60];
>
> reading data from tables in the first database using a plurality of read operations, wherein the read operations are structured in accordance with the retrieved metadata, and wherein the read operations are in an order indicated by the determined dependencies [note: column 7 lines 20-60; column 10 lines 58-59 "In step 31, one entry is read from the extraction data file 62"]; and
>
> writing data to a second database using a plurality of write operations, wherein the write operations are in an order indicated by the determined set of dependencies [note: column 7 lines 20-60; column 8 lines 33-40 "writes the extraction data into file storage section 60"; col. 1 line 55 through col. 2 line 17].
>
> Although Ishihara et al. teaches the invention substantially as cited above, they do not explicitly disclose a read operation and a write operation. However, Ishihara et al. does teach reading data and writing data as part of a copy technique. **Ofek et al.** teaches a *read operation* or a *write operation* as part of a data read request and/or data write request when migrating data from a first storage device to a second storage device [see: column 2 lines 39-48]. It would have been obvious to one of ordinary skill at the time of the invention to have combined Ofek et al with Ishihara et al. because a read operation and a write operation would allow Ishihara et al's system to read and write data to a storage medium.

Final Office Action dated December 17, 2008, pages 3-5.

The Examiner further states:

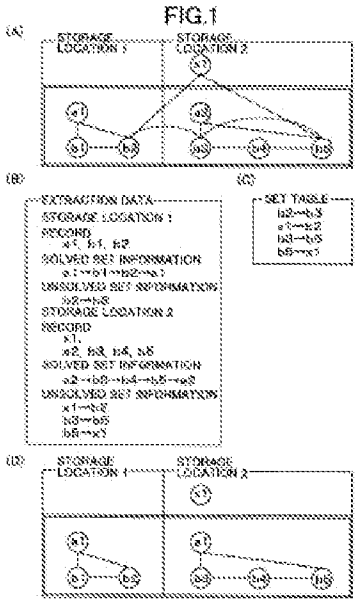
> In order for a migration process to be implemented the system must first determine information related to specifying extraction process and location [see: Figure 1; column 7 lines 1-19]. lshihara et al. teaches at column 10 lines 48-59 that information is described by an order. "Due to the function of the DB extraction section 20, extraction data such as shown in FIG. 12 is extracted from the copy source DB 70. The extraction data comprises; data classification, and record names and record addresses (in the case where the data classification is records), or start point and finish point addresses **for the set relations** (in the case where the data classification is unsolved set information). Furthermore, the solved set information is described by the **order** of the list of the entries."

Final Office Action dated December 17, 2008, pages 8-9.

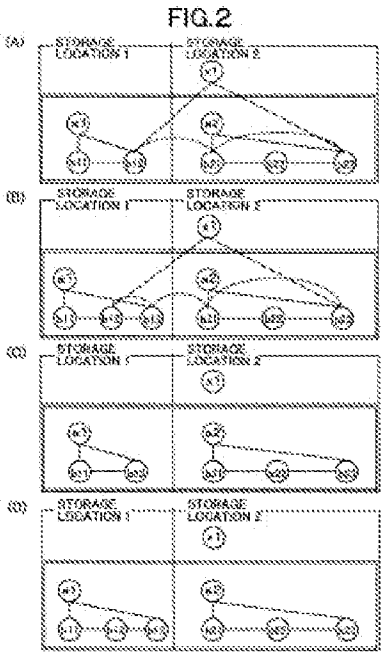
The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). For an invention to be prima facie obvious, the prior art must teach or suggest all claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Independent claim 1 of the present invention reads as follows:

> 1. A method for migrating data between a first database and a second database, the method comprising the steps of:
>
> determining dependencies among a plurality of tables in the first database;
>
> retrieving metadata from the first database, wherein the metadata includes definitions for tables in the first database;
>
> reading data from tables in the first database using a plurality of read operations, wherein the read operations are structured in accordance with the retrieved metadata, and wherein the read operations are in an order indicated by the determined dependencies; and
>
> writing data to the second database using a plurality of write operations, wherein the write operations are in an order indicated by the determined dependencies.

Neither *Ishihara* nor *Ofek* teach or suggest the feature of <u>determining dependencies among a plurality of tables in the first database</u>. The Examiner alleges that this feature is found in the following cited sections of *Ishihara* below:

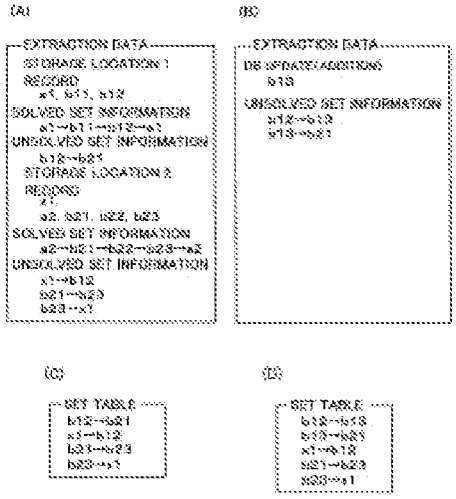


Ishihara, Figure 1.



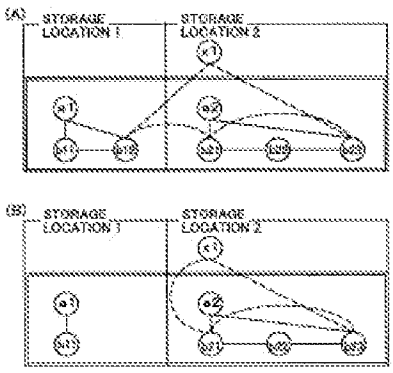
Ishihara, Figure 2.

FIG.3



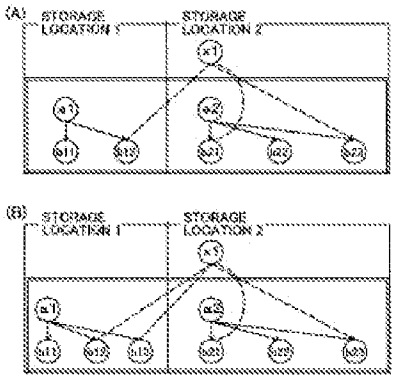
Ishihara, Figure 3

FIG.4



Ishihara, Figure 4.

FIG.5



Ishihara, Figure 5.

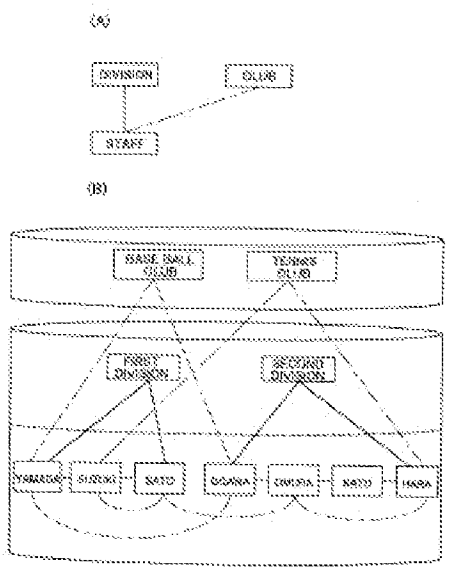
> FIG. **1** illustrates a DB copy method for the case where there is no DB updating during DB copying.
>
> In the case where the copy source DB is a data storage structure such as shown in FIG. **1**, section (A), extraction data such as shown in FIG. **1**, section (B) is extracted from the copy source DB. The extraction data comprises records, solved set information and unsolved set information for each respective storage location. The records are a data body stored in the copy source DB, such as "base ball club", "first division", "Yamada", if the copy source DB is a data structure as shown in FIG. **22**. The solved set information is information specifying the set relations which cannot have set relations extending between different storage locations. The unsolved set information is information specifying the set relations which can have set relations extending between different storage locations. If the extraction data can be extracted, then a set table (to be described in detail later) as shown in FIG. **1**, section (C) is generated from the unsolved set information.

Ishihara, column 7, lines 1-19.

Figures 1-5 provide illustrative examples of data structures and the *Ishihara* data copying method in which there is no database updating during copying, and in which there is database updating (addition and deletion) during copying. Column 7, lines 1-19 provide the accompanying text to Figure 1. In column 7, lines 1-19, *Ishihara* discloses a method for copying data from one database to another. In copying data between databases, the *Ishihara* process partitions a copy source database into multiple regions (*Ishihara,* col. 2, lines 1-2) and copies the records and inter-record connection relations (solved set information and unsolved set information) contained in the respective regions to a copy target database. The inter-record

connection relations for the different regions are extracted and duplicated on the copy target database.

While *Ishihara* teaches copying data from one database to another, *Ishihara* does not teach or suggest determining dependencies among tables in source database. Within the common usage of the term 'dependency', a table is dependent upon another table if the dependent table cannot exist independently of the other (parent) table. In contrast to determining table dependencies, *Ishihara* teaches using inter-record connection relations, or set relations. A set relation in *Ishihara* is a connection relationship between records in a database (*Ishihara*, col. 1, lines 42-44). Figure 22 of *Ishihara*, shown below, provides a visual example of these relationships among data in a database.



Ishihara, Figure 22.

In Figure 22, various connection relations between records are shown (e.g., related objects "Baseball Club", "Yamada", and "Ogawa"). However, while the records are related to each other, there is no teaching in *Ishihara* that the records contain any dependencies on one another. In other words, if any of the records were removed from the database, all of the other records would continue to exist in the database, even though the records may no longer have any connection relations to another object. An inter-record connection relation in *Ishihara* merely describes two or more records that are being of the same or similar kind, rather than specifying that a record is dependent upon another record. Thus, while *Ishihara* discloses that connection

relations among records may be duplicated to the copy target database, there is no teaching or suggestion in *Ishihara* of determining if the records are actually dependent on one another. Consequently, *Ishihara* does not teach or suggest determining dependencies among a plurality of tables in the first database.

Ishihara and *Ofek* also do not teach or suggest the feature of reading data from tables in the first database using a plurality of read operations, wherein the read operations are structured in accordance with the retrieved metadata, and wherein the read operations are in an order indicated by the determined dependencies as recited in claim 1 of the present invention. The Examiner alleges that this feature is found in the following cited sections of *Ishihara* below:

> The records are copied to the copy target DB, and as shown in FIG. **1**, section (D) the inter-record set relations copied based on the solved set information are duplicated. After this, when the unsolved set relations are duplicated based on the set table, a database structure having the same logic construction as in FIG. **1**, section (A) is duplicated on the copy target DB.
>
> Furthermore, in the case where there is DB updating during DB copying, then there is the DB copy method as shown in FIG. **2** and FIG. **3**.
>
> In the case where the copy source DB is a data storage structure as shown in FIG. **2**, section (A), then as with the previous example, the extraction data as shown in FIG. **3**, section (A) is extracted from the copy source DB. Here the case is considered for where as shown in FIG. **2**, section (B), after extracting the data from the storage location 1 of the copy source DB and prior to data extraction from the storage location 2, record "b13" is added to the storage location 1. In this case, an update difference such as shown in FIG. **3**, section (B) is acquired. The update difference comprises both the DB update information and the unsolved set information. Furthermore, the set table as shown in FIG. **3**, section (C) is generated based on the unsolved set information.
>
> Then, as with the previous example, the records are copied to the copy target DB, and as shown in FIG. **2**, section (C) the inter-record set relations which have been copied based on the solved set information, are duplicated.
>
> Incidentally, since the record "b13" is added to the storage location 1, then this must be reflected in the copy target DB. That is, when updating is performed for the copy target DB based on the DB update information for the update difference, then this becomes as in FIG. **2**, section (D). Moreover, since the requirement arises for also modifying the set table with the DB updating, then when the set table is updated based on the unsolved set information for the update difference, the set table becomes as in FIG. **3**, section (D). After this, when the unsolved set relations are duplicated based on the set table, a DB structure having the same logic structure of FIG. **2**, section (A) is duplicated on the copy target DB.

Ishihara, column 7, lines 20-60.

In step **31,** one entry is read from the extraction data file **62.**

Ishihara, column 10, lines 58-59.

Column 7, lines 20-60 of *Ishihara* provides the accompanying text to Figures 1 and 2. This cited section discloses the *Ishihara* process of extracting from the copy source database "extraction data" (comprising records, solved set relations, and unsolved set relations for each database region), registering any unsolved set relations in a set table (*Ishihara*, Figure 11), duplicating the solved set relations, duplicating the unsolved set relations based on the set table, and copying the records and inter-record connection relations contained in the respective regions of the copy source database to the copy target database. The cited section also discloses that database update requests may be processed during database copying by acquiring an update difference due to the update request, and updating the records and inter-record connection relations copied to the copy target database based on this update difference.

Column 10, lines 58-59 of *Ishihara* discloses the first part of the process for registering the unsolved inter-record connection relations in the set table. The cited section discloses reading one entry from the extraction data file to begin the registering process. The extraction data file comprises the records, solved inter-record connection relations, and unsolved inter-record connection relations for each database region.

Ishihara does not teach or suggest performing read operations in an order indicated by determined table dependencies. As *Ishihara* merely discloses extracting connection relationship information among records in a database rather than determining the dependencies among tables in a database as in the presently claimed invention, *Ishihara* cannot teach or suggest performing a read operation based on such determined dependencies.

Furthermore, *Ishihara* makes no mention of performing a read operation in a particular order. Although *Ishihara* discloses that one entry may be read from the extraction data file at a time (*Ishihara*, column 10, lines 58-59), *Ishihara* fails to teach that the entries in the extraction data file are read in any particular order. *Ishihara* merely teaches reading one entry from the extraction file, without specifying that any particular entries should be read before or after other entries, nor does *Ishihara* mention any motivation to do so. For instance, column 10, lines 55-56 also merely describe that the order of the entries in the extraction file describes the solved set information, but fails to disclose performing any read operations in an order indicated by table

dependencies. *Ishihara* is not concerned with reading files in any particular order, as *Ishihara* is concerned with generating a set table which comprises the registered unsolved set relations for the data migration. Consequently, *Ishihara* does not teach or suggest reading data from tables in the first database using a plurality of read operations, wherein the read operations are structured in accordance with the retrieved metadata, and wherein the read operations are in an order indicated by the determined dependencies as recited in claim 1 of the present invention.

Ishihara and *Ofek* further do not teach or suggest the feature of writing data to the second database using a plurality of write operations, wherein the write operations are in an order indicated by the determined dependencies as recited in claim 1 of the present invention. The Examiner alleges that this feature is found in *Ishihara* in column 7, lines 20-60 and in the following cited sections of *Ishihara* below:

> The DB extraction section **20** extracts extraction data from a copy source DB **70** in accordance with the flow chart shown in FIG. **8**, and writes the extraction data into the file storage section **60** as an extraction data file **62**. Here the DB extraction section **20** acts as part of; a data copying device, a data copying step, a data copying function, a connection relations extraction device, a connection relations extraction step, and a connection relations extraction function.

Ishihara, column 8, lines 33-40.

> The present invention takes into consideration the heretofore problems, with the object of providing a database copying technique with increased generality, which efficiently performs DB copying irrespective of the DB structure.
>
> Furthermore, it is an object to distribute a recording medium recorded with a database copying program according to the present invention, so that a person acquiring the recording medium can easily construct a database copy apparatus.
>
> For achieving the above objects, a first solution device is characterized in that a database copy apparatus comprises: a data copying device for partitioning a copy source database into predetermined regions, and copying records and inter-record connection relations contained in the respective regions to a copy target database; a connection relations extraction device for extracting from the copy source database the inter-record connection relations respectively contained in different regions; and a connection relations duplication device for duplicating the inter-record connection relations copied to the copy target database by the data copying device, based on the connection relations extracted by the connection relations extraction device.
>
> With such a construction, copying of the database is performed as follows. (1) The copy source database is partitioned into predetermined regions, and the

> records and the inter-record connection relations contained in the respective regions are copied to the copy target database.

Ishihara, column 1, line 55 to column 2, line 17.

As stated above, column 7, lines 20-60 of *Ishihara* provide the accompanying text to Figures 1 and 2 which discloses the *Ishihara* process of extracting from the copy source database extraction data, registering any unsolved set relations in a set table, duplicating the solved set relations, duplicating the unsolved set relations based on the set table, and copying the records and inter-record connection relations contained in the respective regions of the copy source database to the copy target database. Column 8, lines 33-40 disclose a database extraction component that performs the extraction of data from the copy source database and writes the extracted data to storage as an extraction data file. The database extraction component acts as part of a data copying device and a connection relations extraction device. Column 1, line 55 to column 2, line 17 discloses a summary of the invention for providing a database copy apparatus comprising a data copying device for partitioning a source database in predetermined regions and copying records and connection relations in the regions to a target database, a connections relations extraction device for extracting from the source database inter-record connection relations for the regions, and a connection relations duplication device for duplicating the relations to the target database.

Ishihara does not teach or suggest performing write operations in an order indicated by determined table dependencies. *Ishihara* only discloses extracting connection relationship information among records in a database. *Ishihara* does not mention dependencies among tables in a database, and thus cannot teach or suggest performing a write operation based on such determined dependencies.

Furthermore, *Ishihara* makes no mention of performing a write operation in a particular order. *Ishihara* merely teaches writing data that was extracted from the source database into an extraction data file to a storage location. However, *Ishihara* does not mention anything about writing the extracted data in any order, nor does *Ishihara* mention anything about writing data in an order based on dependencies of tables in the source database. *Ishihara* merely describes that the order of the entries in the extraction file describes the solved set information, but fails to disclose performing any write operations in an order indicate by table dependencies. *Ishihara*

also does not specify that any particular entries should be written before or after other entries, but rather merely teaches generally that data is extracted and written to an extraction file. Consequently, *Ishihara* does not teach or suggest writing data to the second database using a plurality of write operations, wherein the write operations are in an order indicated by the determined dependencies as recited in claim 1 of the present invention.

Claims 4, 6, 19, and 20 depend from claim 1 and are also not obvious over *Ishihara* in view of *Ofek*, at least by virtue of their dependency from claim 1. In addition, these dependent claims comprise additional features not taught or suggested by the combination of *Ishihara* and *Ofek*. For example, claim 19 recites wherein the write operations are in an order indicated by the determined dependencies to ensure referential integrity in the second database. *Ishihara* is not concerned with referential integrity, nor with ensuring referential integrity is maintained in a target database. *Ishihara* does not mention that writing of the extraction file is performed in an order based on the table dependencies to ensure referential integrity of the target database, nor does the Examiner point to any portion of *Ishihara* that does so. In addition, claim 20 recites wherein the predetermined modification operation comprises assigning a default value to a field in a table in the second database that does not have a corresponding field in a corresponding table in the first database. *Ishihara* also fails to teach or suggest a modification operation that comprises assigning a default value to a table field in the target database that does not have corresponding table field in the source database. *Ishihara* merely teaches that when data is added to a region of the database after the region has been migrated to the target database, *Ishihara* allows the target database to be updated with the new data and record connections. There is no teaching in *Ishihara* that its modification operation comprises assigning a default value to a table field in the target database that does not have corresponding table field in the source database, nor does the Examiner point to any portion of *Ishihara* that does so.

Therefore, Appellants respectfully request the rejection of claims 1, 4, and 6 under 35 U.S.C. § 103 in view of the combination of *Ishihara* and *Ofek* be reversed.

B. GROUND OF REJECTION 2 (Claims 2, 3 and 5)

Claims 2, 3 and 5 are rejected under 35 U.S.C. § 103 as being unpatentable over Ishihara et al. (U.S. Patent No. 6,636,876), hereinafter "Ishihara" in view of Ofek et al. (U.S. Patent No.

5,680,640), hereinafter "*Ofek*" and Underwood (U.S. Patent No. 6,633,878), hereinafter "*Underwood*".

The Examiner states:

> Ishihara et al. and Ofek et al. teach the invention substantially as applied to independent claims 1, 7, and 13 above; however they do not explicitly teach use of a markup language. Regarding claims 2, 8 and 14 Ishihara et al. teach storing the determined dependencies to identify table dependencies [see: column 8 lines 35-40 "writes the extraction data into the file storage section 60"]; however they do not explicitly state that it is done using markup language. **Underwood** teaches a conventional architecture such as a client/server system that communicates using an HTTP protocol and the data is transmitted typically in the format of a standard hypertext markup language [see: column 1 lines 46-60 standard hypertext markup language (HTML) format]. It would have been obvious to one of ordinary skill at the time of the invention to have combined Underwood with the cited references since HTML format is a well know standard format, and also provides compatibility among both similar and different platforms when transmitting data.

Final Office Action dated December 17, 2008, page 6.

Claims 2, 3, and 5 are dependent claims depending on independent claim 1. The *Ishihara* reference as relied on by the Examiner still does not teach or suggest all the claim limitations in dependent claims 2, 3, and 5, as explained in the response to the rejection of independent claim 1 in section I above. Consequently, a combination of *Ishihara, Ofek,* and *Underwood* still would not reach the presently claimed invention in claims 2, 3, and 5.

In view of the above, Appellants submit that dependent claims 2, 3, and 5 are not taught or suggested by the combination of *Ishihara, Ofek,* and *Underwood.* Appellants have already demonstrated claim 1 to be in condition for allowance. Appellants respectfully submit that claims 2, 3, and 5 are also allowable, at least by virtue of their dependency on allowable claims.

Therefore, Appellants respectfully request the rejection of claims 2, 3, and 5 under 35 U.S.C. § 103 in view of the combination of *Ishihara*, *Ofek*, and *Underwood* be reversed.

C. CONCLUSION

As shown above, the Examiner has failed to state valid rejections against any of the claims. Therefore, Appellants request that the Board of Patent Appeals and Interferences reverse the rejections. Additionally, Appellants request that the Board direct the Examiner to allow the claims.

Date: April 13, 2009

Respectfully submitted,

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CLAIMS APPENDIX

The text of the claims involved in the appeal is as follows:

1. A method for migrating data between a first database and a second database, the method comprising the steps of:

determining dependencies among a plurality of tables in the first database;

retrieving metadata from the first database, wherein the metadata includes definitions for tables in the first database;

reading data from tables in the first database using a plurality of read operations, wherein the read operations are structured in accordance with the retrieved metadata, and wherein the read operations are in an order indicated by the determined dependencies; and

writing data to the second database using a plurality of write operations, wherein the write operations are in an order indicated by the determined dependencies.

2. The method of claim 1 further comprising:

storing the determined dependencies using markup language to identify table dependencies.

3. The method of claim 1 further comprising:

storing the retrieved metadata using markup language to identify the retrieved metadata.

4. The method of claim 1 further comprising:

performing a predetermined modification operation on the data read from the tables in the first database prior to a write operation to the second database.

5. The method of claim 4 further comprising:

storing the predetermined modification operation using markup language to identify the predetermined modification operation.

6. The method of claim 1 wherein the first database and the second database have dissimilar schemas.

19. The method of claim 1 wherein the write operations are in an order indicated by the determined dependencies to ensure referential integrity in the second database.

20. The method of claim 4 wherein the predetermined modification operation comprises assigning a default value to a field in a table in the second database that does not have a corresponding field in a corresponding table in the first database.

EVIDENCE APPENDIX

This appeal brief presents no additional evidence.

RELATED PROCEEDINGS APPENDIX

This appeal has no related proceedings.